Central Valley Regional Water Quality Control Board 25/26 March 2008 Board Meeting

Response to Comments for the Klondike, Dutch and Telegraph Mines
Tentative Waste Discharge Requirements

The following are Regional Water Quality Control Board, Central Valley Region (Regional Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (tentative NPDES Permit) for the Klondike, Dutch and Telegraph Mines. Public comments regarding the proposed Permit were required to be submitted to the Regional Water Board by 14 February 2008 in order to receive full consideration.

The Regional Water Board received timely comments regarding the proposed NPDES Permit from the two tentatively-identified dischargers, the United States Forest Service, Tahoe National Forest and the Lazarus Mining LLC. The comments were all accepted into the record, and are summarized below, followed by Regional Water Board staff responses.

United States Forest Service, Tahoe National Forest (USFS) COMMENTS

USFS Comment No. 1. Naming of Discharger. The tentative NPDES Permit is being issued for discharge from mining activities and USFS is neither the owner of the mining claims or operator of the mining activity. USFS states that the Regional Water Quality Control Board (Regional Water Board) does not have the statutory authority to name an entity as a Discharger based only on the fact that the entity is the landowner or the land manager. Being incorrectly named as a co-discharger, USFS assumes no liability for violations by the mine owner/operator in water quality matters which occur as a result of its being erroneously named in the proposed NPDES Permit.

USFS further states that the Porter-Cologne Act defines a "discharger as any person who discharges waste which could affect the quality of waters of the State, including owner or person responsible for the operation of a waste management unit. These provisions do not apply to the USFS where it has no ownership of interest or operational control of facilities for the subject mining operations.

RESPONSE: The tentative NPDES permit proposed to regulate drainage from the Klondike, Dutch and Telegraph mine portals located on land owned and managed by USFS. USFS's position that a landowner is not responsible for its tenants' discharges is contrary to State Water Resources Control Board (State Water Board or SWRCB) precedent. The Attorney General and the State Water Board have long interpreted the Porter-Cologne Act and its predecessor, the Dickey Act, to define real property owners as dischargers even when the owner has no involvement with the tenant's activities. Under this precedent, the Regional Water Board may name USFS, as the property owner, in waste discharge requirements for constituents discharging from its land (*Petition of USDA*, SWRCB Order No. 87-

5; Petition of Zoecon, SWRCB Order No. 86-2; 27 Ops. Cal. Atty. Gen. 182 (1956)).

The State Water Board specifically concluded in Order No. 87-5 that a regional water board could name the USFS as a discharger based on its landowner status. USFS's comment letter indicates that, similar to the situation in Order 87-5, USFS is the "land manager" in this case. The tentative NPDES permit issued for public review identified USFS as a "co-discharger". Consistent with State law and SWRCB Order No. 87-5, and in response to USFS's comments, the tentative permit has been modified to name USFS as a "secondary discharger". As a "secondary discharger", the USFS will be responsible for compliance with the NPDES permit and/or water quality violations resulting from the subject discharges if the Discharger (Lazarus Mining LLC) defaults on its permit requirements. Although Lazarus Mining LLC is the primary Discharger named in the tentative permit, USFS manages the land and conducts the necessary restoration to maintain the proper drainage and stabilization of the mine sites. Therefore, Regional Water Board staff believes that USFS does have a secondary role as a Discharger for discharge from the site.

LAZARUS MINING, LLC (DISCHARGER) COMMENTS

Discharger Comment No. 1. General Comments. The Discharger requests that the tentative permit be expanded to include planned changes to the mining facility and operations scheduled for Spring 2008. Lazarus Mining LLC intends to rehabilitate the portals and underground tunnels at both mine discharge sites. If feasible, Lazarus Mining LLC plans to begin limited mining and on-site milling similar to the previously permitted Klondike operations.

The Discharger also states that Issuance of a renewed NPDES permit for drainage only will not facilitate near-term planned operations of Lazarus Mining LLC and, therefore, is of little utility to Lazarus Mining LLC. At a minimum, the mining operations permitted under the previous Order (for Klondike California Mining Corporation) should be carried forward in this Order. If the tentative permit cannot be modified in a timely manner to accommodate planned mining operations, the permit should be pulled from the March 2008 Regional Water Board hearing to provide the time needed to make such changes before the permit is adopted. This may represent the most efficient approach for both Lazarus Mining LLC and the Regional Water Board.

RESPONSE: The tentative NPDES permit is a proposed new permit, not an NPDES permit renewal. The previous NPDES permit for discharge from this site, Order No. R5-98-119, was issued to the Klondike California Mining Corporation for its gold placer mining and milling operation. The Klondike California Mining Corporation, as the previous Discharger, ceased operations of its mining activities and sold all ownership of the mining facility. The previous Discharger

did not submit a Report of Waste Discharge (RWD) for renewal of the previous NPDES permit, therefore the permit expired.

Currently mining operations are not being conducted, however tunnel drainage from the Klondike, Dutch and Telegraph tunnels continues to be discharged. The tentative NPDES permit proposes to regulate the drainage from the mine portals only. The tentative permit includes the same effluent limitations for conventional pollutants as in the previously expired permit. Due to the lack of recent and comprehensive data available for existing discharges from the site (the latest data was from 2001 for select metals only), the tentative permit requires the Discharger to conduct a priority pollutant study to provide the data necessary for the Regional Water Board to conduct a reasonable potential analysis for the portal drainage. In accordance with the requirements at 40 CFR 122.21, the Discharger must submit additional data and information for any proposed new and/or expanded discharge from the site to enable the Regional Water Board to determine what requirements, if any, would be required to adequately implement the technology-based and water quality-based provisions of the Clean Water Act. (Applicants for new industrial facilities that discharge process wastewater must submit this information on NPDES Application Forms 1 and 2D.)

Additionally, to expand the permit scope to include the proposed mining operation, the Discharger must submit a RWD, an antidegradation analysis, and verification that the applicable Environmental Review approvals (National Environmental Protection Act (NEPA) and/or California Environmental Quality Act (CEQA)) have been acquired.

In response to the tentative NPDES permit issued for public review, the Discharger (Lazarus Mining, LLC) submitted a preliminary Plan of Operation including the design of both placer and hard rock gold mining and milling operations. The projection that the discharge from the planned operations will be similar in quality and quantity to the discharge regulated under Order R5-98-119 (for gold placer mining and milling) is speculative at this time. The Klondike. Dutch, and Telegraph Tunnel Mine sites, which were abandoned by the previous mining claimant, were restored by the USFS in 2003. Since then, only mine drainage from the portals has been discharged to the receiving water, Goodyear Creek. Regional Water Board staff needs additional information to determine whether the proposed new construction of mining and processing facilities by Lazarus Mining, LLC will be a new discharge, as defined under 40 CFR 122.2, or a new source as defined under 40 CFR 122.29. According to 40 CFR 122.21(c), any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Regional Water Board.

Federal regulations at 40 CFR 122.44(d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a

narrative or numerical water quality standard. Further, the State Water Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) specifically requires the collection of data adequate to determine reasonable potential for discharges throughout the State (see Sections 1.2 and 1.3).

Discharger Comment No. 2. Background Description. (Page 2, Section II. A. Background.) The Discharger requests that the background information provided in the tentative NPDES permit reflects that the informational request for development of the permit was only made to the USFS and not to Lazarus Mining LLC. Lazarus Mining LLC did not receive Regional Water Board notice for a RWD and requests that the permit background does not misrepresent non-compliance on its behalf.

RESPONSE: Regional Water Board staff agrees and has clarified language in the tentative NPDES permit to acknowledge that a RWD was not requested of the Lazarus Mining LLC.

Discharger Comment No. 3. Order Coverage. (Page 3 Section II. D. Background and Rationale for Requirements.) The Discharger states that the tentative NPDES permit describes the mining site as an inactive mine site and needs to be modified appropriately to address the proposed mining activity.

RESPONSE: The tentative NPDES permit proposes to regulate the currently unregulated drainage discharge from the mine site into Goodyear Creek. If the Discharger decides to initiate mining operations, Standard Provision V.A (Attachment D) of the tentative permit requires the Discharger to furnish the data and information necessary for the Regional Water Board to modify, revoke or reissue the Order, as appropriate to regulate discharges from the proposed mining activities. To further address the Discharger's comment, a Permit Reopener has been added to the tentative permit stating that the Regional Water Board may reopen the permit to modify its requirements according to any new information submitted regarding operations of the mining facility.

See response to Lazarus Mining Comment No. 1 for further detail.

Discharger Comment No. 4. Status of Existing Order. (Page 2, A. Background.) The Discharger requests that the Background discussion in the permit be expanded to clarify the status of the Facility with respect to permitting. This section states that the "Discharger is currently discharging without a permit." Further sections in the permit (e.g., page. 8 first paragraph, page. F-4, section B.) reference the previous Order No. 98-119. Providing additional background on the permitting history will clarify the relationship between the previous permit and the current activities.

RESPONSE: Regional Water Board staff agrees and has made the suggested edits to update the permitting history in the tentative NPDES permit.

Discharger Comment No. 5. Facility Description. (Page 3, B. Facility Description.) The Discharger states that the first sentence in the Facility Description section of the tentative NPDES permit should read, "The Telegraph Tunnel discharges directly into Goodyear Creek approximately 2500 feet upstream from the other two tunnels unnamed tributary. A similar change is necessary on page. F-4, Section II.A.

RESPONSE: Regional Water Board staff has made the suggested correction.

Discharger Comment No. 6. Appropriateness of Flow Basis. The mass limitations in the tentative NPDES permit are inappropriately based on a design flow of 0.30 mgd. Additionally, Section C of the permit provides a definition of Average Daily Discharge Flow that states, "The average daily discharge flow shall not exceed 0.30 mgd." Design flow terminology is not appropriate for a permit that regulates mine drainage. Additionally, the previously expired permit stated, "The average dry weather May through October discharge flow shall not exceed 0.30 mgd" (see page. 4). The Discharger requests the same language in this permit. (see also page. F-12 and Tables F-4 and F-7).

RESPONSE: Regional Water Board staff agrees that design flow is an inaccurate basis for purposes of regulated groundwater discharged from mine portals, as the Discharger is not collecting and treating the flow and therefore has no control of the flow. Regional Water Board staff also acknowledges that during the wet seasons the flow may increase (due to snow melt and runoff) above the regulated flow. Therefore, reference to a design flow has been removed from the tentative permit, and the regulated flow has been modified to reflect the average dry weather flow between the months of May thru October, similar to the previously expired permit.

Discharger Comment No. 7. Receiving Water Limitations for pH. The Discharger states that, on October 25, 2007, the Regional Water Board adopted Basin Plan amendments for pH and turbidity objectives (see Resolution No. R5-2007-0136). In its adopting Resolution, the Regional Water Board made the following findings.

- "6. The current water quality objectives for pH and turbidity, which are not supported by current science regarding the effects of pH and low-level turbidity on beneficial uses, create regulatory compliance problems for some municipal wastewater treatment plants.
- 7. The current pH objectives both maintain pH within a safe range (6.5 to 8.5) and limit changes from background conditions within that safe range. The

1986 U. S. Environmental Protection Agency (USEPA) Quality Criteria for Water does not limit the amount of change when the pH ranges from 6.5 to 9, which is generally considered a safe range for freshwater aquatic life. There are no known aquatic life impacts when pH varies but is maintained within the safe range."

Moreover, the current Basin Plan language for implementing the pH objective states:

"In determining compliance with the water quality objective for pH, appropriate averaging periods may be applied provided that beneficial uses will be fully protected."

Based on the Regional Water Board's adoption of the Basin Plan amendment for pH, which removes the 0.5-unit pH restriction completely, and its findings justifying this amendment, it is appropriate to apply the 0.5-unit change component of the current objective on an annual, rather than 30-day basis. Doing so, along with the requirement to maintain pH between 6.5 and 8.5 at all times, provides for conditions that are fully protective of beneficial uses. Therefore, the Discharger requests that the pH limitation in the tentative permit be changed to read as follows:

"8. pH. The pH to be depressed below 6.5, raised above 8.5, nor the annual average changed by more than 0.5 units."

RESPONSE: As discussed in the Regional Water Board staff response to Discharger Comment No. 1, there is no current discharge data and uncertainty regarding the quality and flow characteristics of the existing discharge from the mine portals. Therefore, Regional Water Board staff will retain the basis for the receiving water pH limitations in the Order. Upon application for the mining activity, and review of more recent water quality data, the Regional Water Board may modify the basis for the pH change receiving water limitation.

Discharger Comment No. 8. Standard Provisions. The Discharger states that a lot of the language in the Standard Provisions is not applicable to a mine discharge, particularly language such as:

Page 13. "a. If the Discharger's wastewater treatment plant is publicly owned"

Page 15. "ii. Upon written request by the Regional Water Board the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators,"

RESPONSE: Except for those provisions that apply specifically to Publicly Owned Treatment Works (POTWs), the Standard Provisions contained in Section VI.A and in Attachment D of the tentative permit apply to all dischargers

and must remain in the permit. (The Standard Provisions in Attachment D are federal provisions as contained in 40 CFR 122.41 and 122.42.)

Discharger Comment No. 9. Monitoring and Reporting Requirements. (Page 17 of Attachment E) The Discharger states that the following proposed language is not applicable to the mine discharge:

"2. This permit, and the MRP which is part of this permit, requires that certain parameters be monitored on a continuous basis. The Facility is not staffed on a full time basis. Permit violations or system upsets can go undetected during this period. The Discharger is required to establish an electronic system for operator notification for continuous recording device alarms. For existing continuous monitoring systems, the electronic notification system shall be installed within 6 months of adoption of this permit. For systems installed following permit adoption, the notification system shall be installed simultaneously."

The Discharger continues to state that only flow is monitored (continuously), however, there is not control on the drainage flow rate. Additionally, there are no power or telephone lines to the site and the site is inaccessible due to snow in the winter season.

RESPONSE: Under the current mine drainage discharge conditions, Regional Water Board staff agrees that the above monitoring and reporting language is not applicable. The monitoring and reporting language in the tentative permit has been modified as appropriate for the mine discharge at this site.

Discharger Comment No. 10. Priority Pollutant Study. (Page 20.) The Discharger states that it does not make sense for the Regional Water Board to require a Priority Pollutant Study on the mine drainage alone. Conducting such a study only makes sense if the planned mining operations are permitted under the proposed permit because data would be gathered on mine discharge quality under normal, long-term operations. Conducting such an expensive study before normal mining operations are in place is unwarranted and would need to be repeated when mining operations do occur. If mining operations are not to be included in this permit (as currently written), then the Discharger requests that the Priority Pollutant Study requirement be removed from the permit and included in a future permit that does allow mining operations.

RESPONSE: As discussed in the Regional Water Board staff response to Discharger Comment No. 1, the reasonable potential for the existing discharge from the mine portals to cause an impact to the receiving water quality is unknown due to lack of data. Regardless of the status of future mining activity, a priority pollutant study is necessary for the Regional Water Board to regulate the existing drainage discharge. Therefore, Regional Water Board staff believes it is necessary for the priority pollutants study requirements to remain in the NPDES Permit. The tentative NPDES permit and study requirements have been clarified to be applicable independent of potential future mining operations.

Discharger Comment No. 11. Attachment B-2: Identification of Discharge Points. The Discharger states that points of discharge are not accurately located on the map.

RESPONSE: Regional Water Board staff has revised the location of the mine portals and location of discharge into the receiving water per a new map provided by the Lazarus Mining, LLC representative.

Discharger Comment No. 12. Whole Effluent Toxicity Monitoring Requirements. The Discharger requests the following modifications to ensure that the most current analytical methods are implemented:

Page E-3, V.A.4. Methods:

"The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition and its subsequent amendments or revisions."

Page E-4, V.B.5. Methods:

"The presence of chronic toxicity shall be estimated as specified in Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 and its subsequent amendments or revisions."

RESPONSE: Regional Water Board staff agrees with the comment and has made the suggested edit.

Discharger Comment No. 13. Compliance Summary. (Page F-6) The Discharger states that the Notices of Violations that are described to have been issued in the past were issued to the former Discharger, the Klondike California Mining Corporation, and therefore are not appropriate to be included in a permit issued to Lazarus Mining LLC. The Discharger requests that the summary of these violations be removed from this new permit.

RESPONSE: Regional Water Board staff has made changes to clarify that the notice of violations were not issued to Lazarus Mining, LLC.

Discharger Comment No. 14. Anti-Degradation. (Page F-17, Satisfaction of the Antidegradation Policy.) The Discharger states that the permit does not address discharges from any mining activities; therefore it does not make sense to require an antidegradation analysis or Priority Pollutant Study on the mine drainage alone. The planned mining operations, which are anticipated to be similar to those that occurred

under the previously expired permit held by Klondike California Mining Corporation, need to be permitted under this Order or, alternatively, the Priority Pollutant Study should be required after this permit is reopened and modified to accommodate planned mining operations. (See Section B.2. p. F-19 also).

RESPONSE: See Regional Water Board staff response to Discharger Comment No. 10 (above) regarding the Priority Pollutant Study requirement. Additionally, State Water Board Administrative Procedure Update (APU 90-004) provides the implementation policy for the State Water Board Resolution 68-16 and 40 CFR 131.12 regarding antidegradation. Under the Antidegradation Policy, State Water Resources Control Board Resolution No. 68-16, a complete antidegradation analysis is required if the issuance of the permit is for a new discharge or material and substantial alterations to the permitted facility occur.

As discussed in Regional Water Board staff response to Discharger Comment No. 1 above, the discharges from the proposed new mining and milling operations (for both placer gold mining and hardrock mining) at the site are considered new activities. The projection that the discharge from the planned operations will be similar in quality and quantity to the discharge regulated under Order R5-98-119 (for gold placer mining and milling) is speculative at this time. Therefore, an antidegradation analysis is required before issuance of a permit for the proposed new activities to demonstrate for the Regional Water Board to consider that:

- 1) the proposed action will not result in significant degradation of water quality, or
- 2) if water quality degradation is projected to occur due to the new mining and milling activities at the site, that the estimated degradation is necessary with respect to the social and economic benefits provided to the people of the State, and meets all other requirements of the Antidegradation Policy.